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EXAMINER

NAJEE-ULLAH, TARIQ S

ART UNIT	PAPER NUMBER
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2152

MAIL DATE	DELIVERY MODE
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06/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/758,114	Applicant(s) SUZUKI ET AL.	
	Examiner TARIQ S. NAJEE-ULLAH	Art Unit 2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-8,10,11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-8,10-11,13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

1. This Office action has been issued in response to Applicant's Amendment filed February 25, 2008. Claims 1-3, 6-8, 10-11, and 13-19 are pending in this application. Claims 4, 5 9, and 12 have been cancelled. Claims 1, 6, 8, 10, 15, 17, and 18 have been amended.

Response to Arguments

1. The rejection of claim 1 under 35 U.S.C. 112, second paragraph is withdrawn.
2. Applicant's arguments with respect to claims 1-3, 6-8, 10-11, and 13-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 6-8, 10-11, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Publication Number 2002/0162026 to Neuman et al (Neuman hereinafter) in view of US Publication Number 2003/0035371 to Reed et al (Reed hereinafter).

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Regarding claims 1, 10, 17, and 18, Neuman discloses **a traffic control computing device comprising: a traffic control interface to connect to traffic control devices which control traffic in a network** (Neuman, Figure 1A, Page 1, paragraph [0002]; Neuman discloses each node or computer on the network has a secure, intelligent network interface, i.e. traffic control interface, with a coprocessor that handles all network communication, i.e. control traffic in a network.); **a traffic control request interface to connect to traffic control request detecting devices which determine whether a traffic control must be executed by said traffic control devices** (Neuman, Fig. 3; Pg. 5, Par. [0071]; Neuman discloses the present invention, as illustrated in FIG. 3, places a secure, intelligent network interface, i.e. traffic control request interface, between the user workstation and the Internet and server, i.e. traffic control request detecting device, so as to provide firewall, i.e. traffic control device, features across all layers of the protocol stack, including filtering, i.e. determining whether a traffic control must be executed, based upon Distinguished Name or the authenticated universally unique username.); **a first storage device in which information about traffic control received via the traffic control request interface is stored** (Neuman, Pg. 3, par. [0047]; Neuman discloses user/passwords can be stored on the centralized management system and given out securely and on an as needed basis to the clients. The word “stored” inherently refers to some type of storage device or medium that is part of the centralized management system. Users and passwords are information associated with traffic control.); **a traffic control computing unit connected to said traffic control interface** (Neuman, Fig. 1A, Pg. 1, par. [002];

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Neuman discloses each node or computer on the network has a secure, intelligent network interface, i.e. traffic control interface, with a coprocessor, i.e. traffic control computing unit, that handles all network communication), **and connected to said traffic control request interface** (Neuman, Pg. 1, par. [0002]; Neuman discloses each node or computer on the network has a secure, intelligent network interface, i.e. traffic control request interface, with a coprocessor, i.e. traffic control computing unit, that handles all network communication), **and connected to said first storage device stored** (Neuman, Pg. 3, par. [0047]; Neuman discloses user/passwords can be stored on the centralized management system and given out securely and on an as needed basis to the clients. The word “stored” inherently refers to some type of storage device or medium that is part of the centralized management system. Users and passwords are information associated with traffic control.); **and a traffic control computing management interface** (Neuman, Figure 1A, central management console), **wherein said traffic control computing unit computes traffic control algorithms based on traffic control requests received from said traffic control request detecting devices and stored in the first storage device and sends the traffic control algorithms to said traffic control interface** (Neuman, Pg. 1, par. [0002]; Neuman discloses the intelligent network interface encrypts outgoing packets and decrypts incoming packets from the network based on a key and algorithm, i.e. traffic control algorithms, managed, i.e. computed, by a centralized management console (CMC), i.e. the main traffic control computing unit, on the network. Pg. 2, par. [0031]; For a client to initiate a connection with the server, the client's secure, intelligent network interface

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sends a request to the central management console (CMC) with the identifying information about the connection that the client wishes to send to the server.)

Reed discloses **wherein said traffic control computing unit** (Reed, pg. 5, par. 53; congestion-fee switching system) **compares a sender of a traffic control request** (Reed, pg. 5, par. 53, request controller) **received through said traffic control request interface** (Reed, pg. 5, par. 53, request controller) **for a match with any of traffic control information objects** (Reed, pg. 5, par. 53, priority information) **stored in said first storage device and rejects said traffic control request if said sender of the received request is not stored in said first storage device** (Reed, pg. 5, par. 56, request controller sends rejection responses);

and wherein said traffic control computing management interface (Reed, fig. 1D, 140) **is configured to operate as a contact point for communicating with a network administrator** (Reed, pg. 15, par. 186; system processor communicates with a global administration and management system);

and said traffic control computing unit (Reed, pg. 5, par. 53; congestion-fee switching system) **checks whether a traffic control request that conflicts with said traffic control request received is included in said first storage device and, if a conflicting traffic control request is included, compares a sender of the conflicting traffic control request with the sender of said traffic control request received, and, if both the senders are different, sends a notification of the conflicting requests to said traffic control computing management interface** (Reed, pg. 2, par. 15; Control information is sent to resolve data transmission conflicts

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in the interconnect structure where each node is a successor to a node on an adjacent outer level and an immediate successor to a node on the same level. Message data from an immediate predecessor has priority. Control information is sent from nodes on a level to nodes on the adjacent outer level to warn of impending conflicts.).

Neuman and Reed are analogous art because they are from the same field of endeavor of network communication. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Reed's traffic control methods with Neuman's invention. The suggestion/motivation would have been to provide for a more efficient, congestion-free switching system (Reed, pg. 4, par. 49).

Regarding claim 2, Neuman discloses the invention substantially as described in claim 1 above including, **an information unit for acquiring information objects about traffic control details per a traffic control device associated with IDs of the traffic control devices which are now executed separately by said traffic control devices** (Pg. 1, par. [0002]; Neuman discloses each node or computer on the network has a secure, intelligent network interface, i.e. traffic control interface, with a coprocessor, i.e. an information unit, that handles all network communication. Pg. 3, par. [0046]; Neuman further discloses each node (client, server, mainframe, etc.) should feature rules downloaded from server based on either the machine (MAC address) or the user ID.); **and second storage device in which said acquired information objects about traffic control details per traffic control device associated with the IDs of the traffic control devices are stored** (Pg. 4, par. [0069]; Neuman discloses all authentication information is stored on a Central Management Console (CMC) implying

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CMC also functions as a second storage device. Pg. 5, par. [0071]; Neuman discloses the present invention, places a secure, intelligent network interface between the user workstation and the Internet and server so as to provide firewall features across all layers of the protocol stack, including filtering based upon Distinguished Name or the authenticated universally unique username, i.e. associated IDs of the traffic control devices.).

Regarding claim 3, Neuman discloses the invention substantially as described in claim 1 above including, **wherein IDs of said traffic control request detecting devices are stored in said first storage device** (Pg. 3, par. [0047]; Neuman discloses the invention allows transparent single sign on to any device, i.e. traffic control request detecting device, using applications or servlets supplied by the Central Management Counsel (CMC) to allow user/password, i.e. IDs, to be negotiated automatically. User/passwords can be stored on the centralized management system and given out securely and on an as needed basis to the clients. The word “stored” inherently refers to some type of storage device or medium that is part of the centralized management system.).

Regarding claim 6, Neuman discloses the invention substantially as described in claim 1 above including, **wherein, if both said senders match, said traffic control computing unit is structured to assume that said sender of said conflicting traffic control request would have sent a request to cancel said conflicting traffic control request** (Fig. 4, Pg. 6, par. [0089]; Neuman discloses in addition to making security functions universal, the invention makes them centrally manageable. A network

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administrator can specify policies, update agents, patch vulnerabilities, track usage, and manage users all from a central management server. Pg. 6, par. [0093]; Neuman further discloses the invention maintains a cache of servlets that are regularly checked, i.e. compared, against the master repository on the CMC. These servlets translate the requests into manageable instructions.).

Regarding claim 7, Neuman discloses the invention substantially as described in claim 2 above including, **wherein, when said information acquiring unit has been successful in acquiring a traffic control information object from a traffic control device, said traffic control computing unit is structured to determine that said traffic control device is operating and updates the traffic control information object for the traffic control device stored in said storage device to said traffic control information object newly acquired** (Pg. 3, par. [0043]; Neuman discloses memory can include updateable flash memory for the OS. An input is included for physical identification requirements, whether directly connected to the client machine, such as a serial, USB or parallel port, or implemented as a port, such as a USB port or parallel port, on the secure, intelligent network interface.).

Regarding claim 8, Neuman discloses the invention substantially as described in claim 2 above including, **wherein that when said traffic control information object has failed to be acquired from a traffic control device, said traffic control computing unit determines that said traffic control device is not operating and deletes the traffic control information object for the traffic control device determined as being non-operating from said storage device** (Fig. 9, Pg. 5, par.

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[0076; Neuman discloses the present invention provides non-host integrated fault tolerance. Fault tolerance is implemented between machines without needing to install any software or hardware on the critical machines. As illustrated in FIG. 9, by monitoring the server, i.e. traffic control device, from its network connection to ensure that it is still up or not, the secure, intelligent network interface can identify when functionality needs to be moved to the backup server. Although illustrated with respect to servers, it can be implemented on any machine, be it a workstation, mainframe, etc., that includes the interface of the present invention.).

Regarding claim 11, Neuman discloses the invention substantially as described in claim 10 above including, **if said conflict exists, determining whether said sender of the received request and the sender of the conflicting control request match** (Fig. 4, Pg. 6, par. [0093]; Neuman further discloses the invention maintains a cache of servlets that are regularly checked, i.e. compared, against the master repository on the CMC. These servlets translate the requests into manageable instructions. Pg. 3, par. [0047]; Neuman discloses user/passwords can be stored on the centralized management system and given out securely and on an as needed basis to the clients; **and if both the senders match, deleting said conflicting control request from said storage device** (Pg. 6, par. [0095]; Neuman discloses if the login request, i.e. traffic control request, is not successful, i.e. deleted, the system prompts the client for the username and password, which it then sends to the CMC for storage, and repeats the procedure until the user is logged in, or gives up. It is inherent that the login request, i.e. traffic control request, is removed since no access is granted unless the proper login

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information is stored on the CMC. Since the login request fails to produce the users desired result, it is inherent that the request has been deleted by the CMC.).

Regarding claim 13, Neuman discloses the invention substantially as described in claim 10 above including, **determining whether the sender of the received traffic control request is from a pre-registered sender device** (Fig. 4, Pg. 6, par. [0093]; Neuman further discloses the invention maintains a cache of servlets that are regularly checked, i.e. compared, against the master repository on the CMC. Pg. 3, par. [0047]; Neuman discloses user/passwords can be stored, i.e. pre-registered, on the centralized management system and given out securely and on an as needed basis to the clients. The word “stored” inherently refers to some type of registration or saving on a storage device or medium that is part of the centralized management system.); **and rejecting the control request from a non-registered sender** (Pg. 6, par. [0095]; Neuman discloses if the login request, i.e. traffic control request, is not successful, i.e. rejected, the system prompts the client for the username and password, which it then sends to the CMC for storage, and repeats the procedure until the user is logged in, or gives up. It is inherent that the login request, i.e. traffic control request, is rejected since no access is granted unless the proper login information is stored, i.e. pre-registered, on the CMC. Since the login request fails to produce the users desired result, it is inherent that the request has been rejected by the CMC.).

Regarding claim 14, Neuman discloses the invention substantially as described in claim 13 above including, **wherein, if said sender of the received traffic control request is a pre-registered sender, said step of determining whether said received**

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traffic control request conflicts with any of control requests previously stored in said storage device is executed (Pg. 6, par. [0095]; Neuman discloses if the login request, i.e. traffic control request, is not successful, i.e. rejected, the system prompts the client for the username and password, which it then sends to the CMC for storage, and repeats the procedure until the user is logged in, i.e. the request is executed, or gives up.).

Regarding claim 15, Neuman discloses the invention substantially as described in claim 10 above including, **receiving information as to whether said network administrator has rejected a part or all of either of the conflicting control requests** (Fig. 4, Pg. 6, par. [0089]; Neuman discloses in addition to making security functions universal, the invention makes them centrally manageable. A network administrator can specify policies, update agents, patch vulnerabilities, track usage, and manage users all from a central management server.); **and notifying the sender of the rejected control request that the control request was rejected** (Pg. 6, par. [0095]; Neuman discloses if the login request, i.e. traffic control request, is not successful, i.e. rejected, the system prompts the client for the username and password, which it then sends to the CMC for storage, and repeats the procedure until the user is logged in, or gives up. It is inherent that the login request, i.e. traffic control request, is rejected since no access is granted unless the proper login information is stored, i.e. pre-registered, on the CMC. Since the login request fails to produce the users desired result, it is inherent that the request has been rejected by the CMC.).

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Regarding claim 16, Neuman discloses the invention substantially as described in claim 10 above including, **comparing said computed control algorithm with control algorithms separately held by the traffic control devices connected to the computing device** (Pg. 1, par. [0002]; Neuman discloses the intelligent network interface encrypts outgoing packets and decrypts incoming packets from the network based on a key and algorithm, i.e. traffic control algorithms, managed, i.e. computed, by a centralized management console (CMC), i.e. the main traffic control computing unit, on the network.); **if said computed control algorithm is not held by said traffic control devices, transmitting the computed control algorithm to the appropriate one of said traffic control devices** (Pg. 1, par. [0011]; Neuman discloses the secure, intelligent network interface can apply the appropriate encryption algorithm to the appropriate network device.).

Regarding claim 19, Neuman discloses the invention substantially as described in claim 18 above including, **acquiring second information which comprises the identifiers of said traffic control devices and the traffic control functions of the traffic control devices** (Pg. 3, par. [0047]; Neuman discloses user/passwords can be stored on the centralized management system and given out securely and on an as needed basis to the clients. The word “stored” inherently refers to some type of storage device or medium that is part of the centralized management system. Users and passwords are information associated with traffic control.); **and storing said second information acquired into the storage device** (Pg. 4, par. [0069]; Neuman discloses all authentication information is stored on a Central Management Console (CMC)

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implying CMC also functions as a second storage device. Pg. 5, par. [0071]; Neuman discloses the present invention, places a secure, intelligent network interface between the user workstation and the Internet and server so as to provide firewall features across all layers of the protocol stack, including filtering based upon Distinguished Name or the authenticated universally unique username, i.e. associated IDs of the traffic control devices.), **wherein, if the control algorithm calculated by said traffic control computing device has already been held by one of said traffic control devices, said traffic control computing device does not transmit the calculated control algorithm** (Pg. 1, par. [0002]; Neuman discloses the intelligent network interface encrypts outgoing packets and decrypts incoming packets from the network based on a key and algorithm, i.e. traffic control algorithms, managed, i.e. computed, by a centralized management console (CMC), i.e. the main traffic control computing unit, on the network. Pg. 2, par. [0031]; For a client to initiate a connection with the server, the client's secure, intelligent network interface sends a request to the central management console (CMC) with the identifying information about the connection that the client wishes to send to the server.).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (US 4,890,281 to Balboni et al; US 2002/0141378 to Bays et al; US 4,780,821 to Crossley; US 6,606,495 to Korpi et al; US 6,665,701 to Combs; US 5,889,953 to Thebaut et al; US 4,979,118 to Kheradpir; US 6,628,670 to Galand et al).

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARIQ S. NAJEE-ULLAH whose telephone number is (571)270-5013. The examiner can normally be reached on Monday through Friday 8:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

T. N.

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146